

REMARKS

In the above-noted Official Action, claims 1-3, 7-9, 13-18, 22-24 and 28-33 were rejected under 35 U.S.C. §102(b) over ENDOH et al. (U.S. Patent No. 5,819,103).

Claims 4-6 and 19-21 were rejected under 35 U.S.C. §103(a) over ENDOH, in view of KAPLOW et al. (U.S. Patent No. 4,202,041). Claims 10-12 and 25-27 were rejected under 35 U.S.C. §103(a) over ENDOH, in view of MAHONEY et al. (U.S. Patent No. 5,659,639). In view of the herein-contained amendments and remarks, Applicant respectfully requests reconsideration and withdrawal of each of the outstanding rejections, as well as an indication of the allowability of each of the claims now pending.

Applicant traverses the rejection of claims 1-3, 7-9, 13-18, 22-24 and 28-33 under 35 U.S.C. §102(b) over ENDOH. The outstanding Official Action asserts that "Endoh et al... discloses an image processing computer system for a photogrammetric analytical measurement in which a survey map is produced by connecting at least two sets of pictures featuring a photographed target located at a given target position". In this regard, amended claim 1 recites "a first monitor controller that selectively displays only one picture in each of at least two sets of pictures" and "a third monitor controller that visually displays a connection relationship between pictures displayed on said editing-display

area". Amended claim 1 also recites "said image processing computer system is configured to produce a survey map by a photogrammetric analytical measurement using the connection relationship" (emphasis added). Applicant notes that each of amended claims 13, 32 and 33 recite features similar to the above-noted features recited in amended claim 1.

Applicant respectfully submits that the above-noted assertion of the outstanding Official Action is in error. In particular, ENDOH does not disclose or suggest an invention related to "photogrammetric analytical measurement", or a "system... configured to produce a survey map... by a photogrammetric analytical measurement using the connection relationship". In fact, ENDOH does not mention "photogrammetric", "photogrammetry" or any similar term anywhere therein. In this regard, Applicant respectfully submits that ENDOH does not relate to the above-noted features recited in amended claims 1, 13, 32 and 33. Applicant further submits that the above-noted features are not disclosed in any of the references applied in the outstanding Official Action. In this regard, Applicant respectfully submits that the prior art does not disclose or suggest a combination including "a connection relationship between pictures" and "said image processing computer system is configured to produce a survey map by a photogrammetric analytical measurement using the connection relationship", as is recited in claim 1.

Applicant respectfully submits that several features of the present invention are described at, for example, pages 36-45, with respect to figures 8-13. In particular, the connection between two sets of pictures can be used to indicate that "the transformation of the second scene coordinate system ($X_s'-Y_s'-Z_s'$) into the first scene coordinate system ($X_s-Y_s-Z_s$) is performed on the basis of" a formula (see page 40, lines 10-12). In the context of photogrammetry, the transformation of multiple coordinate systems into a single reference coordinate system has previously been difficult because the connection between pictures originally taken using different coordinate systems has not been visually indicated to the photogrammetric apparatus operator. Thus, even when the target position is moved, the connection relationship can be used to indicate, for example, that the pictures have been processed with reference to a common coordinate system.

The outstanding Official Action also asserts "Endoh... discloses... a monitor that displays a scene including a picture display area and an editing display area (Figure 2 where the left portion (60, 61, 62 and 63) are picture display area and the right portion is the editing display area)". In this regard, claim 1 recites "a monitor that displays a scene, said monitor including a picture-display area and an editing-display area". Claims 13, 32 and 33 also recite features similar to the above-noted feature of claim 1.

Applicant respectfully submits that the above-noted assertion of the outstanding Official Action is in error. In particular, with respect to Figure 2, ENDOH discloses at,

for example, column 8, lines 46-48, that "[f]rames 60 to 63 are title frames assigned to the respective information units" (emphasis added). Accordingly, Applicant respectfully submits that, contrary to the assertion of the outstanding Official Action, the left portions (60, 61, 62 and 63) are not "picture-display" areas in Figure 2 of ENDOH.

Accordingly, for each of the reasons noted above, Applicant respectfully asserts that ENDOH does not disclose or suggest at least the above-noted features recited in claims 1, as well as the similar features recited in claims 13, 32 and 33. Additionally, Applicant further submits that the above-noted features that have been shown not to be disclosed or suggested by ENDOH, are also not disclosed or suggested by the additional art applied by the Examiner.

Applicant further submits that each of claims 2-12, and 14-31 are allowable, at least because each depends, directly or indirectly, from an allowable independent claim, as well as for independent reasons related to their own additional recitations.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection of claims 1-3, 7-9, 13-18, 22-24 and 28-33 under 35 U.S.C. §102(b) over ENDOH. Applicant also respectfully requests reconsideration and withdrawal of the outstanding rejection of claims 4-6, 10-12, 19-21 and 25-27 under 35 U.S.C. §103(a) over ENDOH, in view of KAPLOW et al. Additionally, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejection of claims 10-12 and 25-27

under 35 U.S.C. §103(a) over ENDOH, in view of MAHONEY. Accordingly, Applicant respectfully requests reconsideration and withdrawal of each of the outstanding rejections, as well as an indication of the allowability of each of the claims pending, in due course.

Applicant has also added claims 34-37 to depend from claims 1, 13, 32 and 33 respectively. Claim 34 recites a feature of "wherein said at least two sets of pictures comprises a first set having pictures featuring a photographed target located at a first target position and a second set having pictures featuring the photographed target located at a second target position". Additionally, claims 35-37 recite features similar to the above-noted feature of claims 34.

In other words, claims 34-37 specify a feature used to assist in photogrammetric analysis. In particular, a group or set of pictures include a photographed target at a common position (a first target position). When the target is moved to another position (a second target position), a second group of pictures are taken. A relationship between pictures in the different groups is indicated by the connection relationship recited in, e.g., claim 1. The connection relationship can be used for photogrammetric analytical measurement to produce a survey map. Applicant respectfully submits that none of the references applied by the Examiner relate to photogrammetry or the production of survey maps, let alone producing a set of pictures that includes the photographed target at a

common position. Furthermore, as noted above, Applicant respectfully submits that the prior art does not disclose or suggest a combination including "a connection relationship between pictures" and "said image processing computer system is configured to produce a survey map by a photogrammetric analytical measurement using the connection relationship", as is recited in claim 1. Accordingly, Applicant respectfully submits that the prior art applied by the Examiner does not disclose or suggest the combination claimed in any of claims 34-37.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections of claims 1-33, entry of claims 34-37, and an indication of the allowability of all the claims now pending, in due course.

SUMMARY AND CONCLUSION

Applicant has made a sincere effort to place the present application in condition for allowance and believes that he has now done so. Applicant has discussed the features recited in Applicant's claims and has shown how these features are not taught, disclosed nor rendered obvious by the references applied by the Examiner.

Any amendments to existing claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

P19355.A04

Should there be any questions, the Examiner is invited to contact the undersigned
at the below-listed number.

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MARKED UP COPY OF AMENDED CLAIMS

1. (Amended) An image processing computer system for a photogrammetric analytical measurement [in which a survey map is produced by connecting at least two sets of pictures featuring a photographed target located at a given target position], said system comprising:

a monitor that displays a scene, said monitor including a picture-display area and an editing-display area;

a first monitor controller that selectively displays only one picture in each of at least two sets of pictures [set] on said picture-display area of said scene;

a second monitor controller that transfers a displayed picture from said picture-display area to said editing-display area and vice versa; and

a third monitor controller that visually displays a connection relationship between pictures displayed on said editing-display area of said scene,

wherein said image processing computer system is configured to produce a survey map by a photogrammetric analytical measurement using the connection relationship.

13. (Amended) An image processing computer system for a photogrammetric analytical measurement in which a survey map is produced by connecting a first group [including at least a set]of pictures [featuring a photographed target located at a first target position]and a second group [including at least a set]of pictures[featuring a

photographed target located at a second target position to each other], said system comprising:

a monitor that displays a first scene, said monitor including a picture-display area and an editing-display area;

a first monitor controller that selectively displays only one picture in each of [a set included in] said first group and [only one picture in a set included in] said second group, on said picture-display area of said first scene;

a second monitor controller that transfers a displayed picture from said picture-display area to said editing-display area and vice versa; and

a third monitor controller that visually displays a connection relationship between pictures displayed on said editing-display area of said first scene,

wherein said image processing computer system is configured to produce a survey map by a photogrammetric analytical measurement using the connection relationship.

32. (Amended) An image processing method for a photogrammetric analytical measurement in which a survey map is produced by connecting a first group [including at least a set]of pictures[featuring a photographed target located at a first target position] and a second group [including at least a set] of pictures[featuring a photographed target located at a second target position to each other], said method comprising[steps of]:

displaying a scene[, including] on a monitor that includes a picture-display area

and an editing-display area[, on a monitor];

selectively displaying only one picture in each of [a set included in] said first group and [only one picture in a set included in] said second group, on [said] the picture-display area of [said scene] the monitor;

transferring a displayed picture from said picture-display area to said editing-display area; [and]

visually displaying a connection relationship between pictures displayed on said editing-display area of said scene, and

producing a survey map by a photogrammetric analytical measurement using the connection relationship.

33. (Amended) A memory medium storing an image processing program for a photogrammetric analytical measurement in which a survey map is produced by connecting a first group [including at least a set] of pictures [featuring a photographed target located at a first target position] and a second group [including at least a set] of pictures [featuring a photographed target located at a second target position to each other], said program [featuring steps of] including:

displaying a scene[, including] on a monitor that includes a picture-display area and an editing-display area[, on a monitor];

selectively displaying only one picture in each of [a set included in] said first group

P19355.A04

and [only one picture in a set included in] said second group, on [said] the picture-display area of [said scene] the monitor;

transferring a displayed picture from said picture-display area to said editing-display area; [and]

visually displaying a connection relationship between pictures displayed on said editing-display area of said scene, and

producing a survey map by a photogrammetric analytical measurement using the connection relationship.